

Indian Journal of Physics

Volume 86 · Number 7 · July 2012

Astrophysics, Atmospheric and Space Physics

Chandra S, Chang Ch, Kegel WH, Patzer ABC, Bolick U, Sedlmayr E:
Study of possible new ring molecules in cosmic objects 555

Rathore BS, Kaushik SC, Bhadoria RS, Parashar KK, Gupta DC:
Sunspots and geomagnetic storms during solar cycle-23 563

Biophysics

Biswas N, Dey A, Mukhopadhyay AK:
Loading rate effect on nanohardness of human enamel 569

Condensed Matter and Material Physics

Maaider K, Jennane A, Khalil A, Masaif N:
A new analytical description in C^{2+} doped $LiBO_3$,
C (Ni, Zn...); B (Nb, Ta) 575

Rahimi H:
Band gap properties of one-dimensional
aperiodically deterministic multilayer structure
containing left-handed materials 583

Abraham KE, Mathew V, Joseph J, Jacob S:
Crystallization and spectral studies of lead
malonate 589

Tahiri M, Masaif N, Jennane A:
Defect structure analysis of lithium niobate single
crystals and lithium tantalate ceramics with the
next-nearest-neighbor interactions 595

Rana NK, Prasad JN:
Effects of local relaxation on electronic structure of
substitutional Mn atoms in (GaMn)As 601

Saha S, Manik NB:
Enhancement of efficiency of Phenosafranin based
organic photovoltaic devices using nano particles 605

Thejo Kalyani N, Dhoble SJ, Ponde RB:
Enhancement of photoluminescence in various
 $Eu_xRe_{(1-x)}TTA_3Phen$ (Re = Y, Tb) complexes molecularly
doped in PMMA 613

Fen YW, Yunus WMM, Talib ZA:
Real-time monitoring of lead ion interaction on gold/
chitosan surface using surface plasmon resonance
spectroscopy 619

Varada Rajulu K Ch, Sambasiva Rao K, Tilak B,
Gangadharudu G, Swathi A:
Structure, spectroscopic and piezoelectric properties
of BNBT nanocrystalline ceramics 625

General and Interdisciplinary Physics

Kumar R, Chaudhary RK, Rangra VS:
Dielectric relaxation studies of binary mixtures of
tetrahydrofuran and *N,N*-dimethylformamide in benzene
solutions using microwave absorption data 635

Nuclear Physics

Tawfik A:
Event-by-event fluctuations of particle ratios in
heavy-ion collisions 641

Optics and Spectroscopy

Liu ZY, Du HC, Sun SH, Li L, Ma LL, Hu BT:
Dynamics of Coulomb explosion of Xe clusters in an
ultrafast high-intensity laser field 647

Khordad R:
Pressure effect on the threshold frequency of absorption
in a quantum pseudodot 653

Plasma Physics

Mahmoud MA, Gamal YEE:
Kinetics of plasma formation in sodium vapor excited by
nanosecond resonant laser pulses 659

Further articles can be found at www.springerlink.com

Indexed/abstracted in Chemical Abstracts Service (CAS), Google Scholar, Indian
Science Abstracts, INIS Atomindex, International Bibliography of Book Reviews (IBR),
International Bibliography of Periodical Literature (IBZ), OCLC, SPIRES, Summon by
Serial Solutions

Instructions for Authors for *Indian J Phys* are available at www.springer.com/12648

Indian Journal of Physics

Official Publication
of the Indian
Association
for the Cultivation
of Science

